



Seabotix vLBV 950



- **Deep water highly capable MiniROV**

The new **vLBV950** is a deep water solution with a high degree of capability. Rated to 950 meters (3,116ft) and still the same compact dimensions of the vLBV300. Vector thruster configuration with dual vertical thrusters and an impressive power to weight ratio.

- **Powerful variable vector thruster configuration**

Vectored thruster configuration provides amazing control in all horizontal directions, therefore the use offshore in demanding conditions. The **vLBV950** has impressive bollard thrust with 18.1-22.5 kg f (40-50 pd f) forward. Thruster vector angle is variable from equal horizontal to forward optimized. Dual vertical thrusters offer greater vertical control and roll stabilization.

- **Optimized mechanical design**

The **vLBV950** has undergone extensive mechanical design to optimize stability, capability, flexibility and serviceability. No other small ROV has had such attention to every detail as the **vLBV950**. Our in house ex-America's Cup physicist has carefully examined pressure zones, moment arms, center of gravity, meta center and more to produce an exceptional small ROV.

- **Flexible stable platform**

Out of the box the **vLBV950** is a stable platform. To capitalize on the stability the **vLBV950** is able to accept a wide range of cameras, sensors, tools and more. Such as four video channels including HD, 4 high speed data channels and three high speed Ethernet channels.

- **Ultra low drag, strong tether**

The **vLBV950** uses the low drag tether that SeaBotix has used in all it's ROV system. At 9.05 mm (0.35 in) nominal diameter and 100 kg (220 pd f) working load the tether has minimal impact on the performance. The tether can be attached to the rear or top of the **vLBV950** depending on conditions.

- **Intuitive control system**

SeaBotix MiniROV controls have been regarded as the most intuitive of all small ROVs. The **vLBV950** is no different with the user friendly operator control unit and integrated control console.

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| LBV | |
| Depth Rating | 950 Meters Seawater (MSW) - 3,116 Feet Seawater (FSW) |
| Length | 620 mm - 24.4 in |
| Width | 390 mm - 15.4 in |
| Height | 390 mm - 15.4 in |
| Diagonal | 492 mm - 19.4 in |
| Weight in Air | 18.1 kg - 39.9 lbs |
| Protection | Protective shell and polyethylene bumper frame |
| Thrusters | |
| Thruster configuration | Five (5) Brushless DC thrusters - Two (2) forward, two (2) vertical and one (1) lateral. Each thruster is identical and isolated |
| Bollard Thrust (forward) | 18.1-22.5 kg f - 40-50 pd f (variable) |
| Bollard Thrust (vertical) | 9 kg f - 19.8 pd f |
| Bollard Thrust (lateral) | 7.3-15.2 kg f - 16.2-33.5 pd f (variable) |
| Cameras & Lighting | |
| Camera Tilt | 180 degrees |
| Diagonal Angle of View | 65 degrees in water |
| Camera - Primary | 600 line color - 0.001 Lux @ f1.4 |
| Focus | Manual focus control via hand controller. |
| Video Format | NTSC or PAL |
| Output Signal | Composite |
| Internal Lighting | 2 x 1,080 Lumen LED arrays. Variable intensity via operator control unit. Tracking forward camera. |
| Control System | |
| Configuration | Hand controller, monitor and surface power supply built into protective case |
| Data Channels | 4 x RS232/845 (115kb), 3 x 100base/t Ethernet |
| Monitor | 38 cm - 15 in color LCD |
| Sensors | Heading, depth, temperature, pitch, roll |
| Auto Functions | Depth, heading, trim, roll compensation |
| Hand Controller | |
| Length | 210 mm - 8.3 in |
| Width | 160 mm - 6.3 in |
| Height | 75 mm - 3 in |
| Weight | 650 grams - 1.4 lbs |
| Joystick | Single - forward, reverse, rotate left, rotate right, roll left, roll right |
| Joystick Steps | 32 |
| Vertical Thruster | Proportional control knob |
| Additional Controls | Membrane keypad - thruster gain control, trim, auto depth, auto heading, camera tilt, camera focus, camera switch, light On/Off, light intensity, accessories, video overlay position, power On/Off, programming keypad |
| Safety | I.P. 64 - splash proof |
| Surface Power Supply | |
| Length | 718 mm - 28.25 in |

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| Width | 784 mm - 30.875 in |
| Height | 590 mm - 23.25 in |
| Weight | 31.1 kg - 68.6 lbs |
| Input Voltage | 100-240 VAC |
| Power Requirement | 3,000 Watts maximum |
| Safety | Isolated input power, circuit breaker, line insulation monitor, leak detector. Meets and exceeds "Code of Practice for the Safe Use of Electricity in Water" |
| Water Proofing | I.P. 64 - Splash proof |
| Tether | |
| Diameter | 9.05 mm (0.35in) nominal |
| Length | 750, 1000, 1250, 2000 meters (2460, 3280, 4101, 6562 feet) |
| Working Strength | 100 kg f - 220 pd f |
| Breaking Strength | 700 kg f - 1,543 pd f |
| Strength Member | Kevlar |
| Buoyancy | Neutral in fresh water - slightly positive in Seawater |
| Conductors | Twisted pair with shield (power), twisted pair (video), twisted pair (Ethernet) |
| Reel construction | Heavy duty marine grade materials (stainless steel, Starboard PE) |
| Reel Capacity | 250 meters - 820 feet |
| On-Screen Information Display | |
| Information Displayed | Thruster gain settings, light level, Trim On/Off, heading, depth, turns counter, camera angle, water temperature, time, date, user text |
| User Text | Up to 28 characters |
| Positioning | Bottom, top or off |
| Menus | Quick menu, setup, calibrate, diagnostics, options |
| Spares Contents | Fastener kit, seal kit, propellers, gel lube, Kluber grease, acrylic polish, fuse |
| Tool Contents | 1.5, 2, 3, 4, 5 mm hex ball drivers, #1, #2 Phillips screw drivers, 10 mm socket driver, small straight blade screwdriver, 11/16 socket, 19 mm open end, O-ring insertion tool, vacuum pump |
| Spare Thruster | Brushless DC thruster assembly |
| Manuals | Operators manual, service and repair CD-ROM |